

IN THE CLAIMS:

1. (Original) A composition comprising:
a metal-chelating ligand including a tetraazacyclododecane macrocycle ring core,
and
at least two non-identical substituents covalently bonded to the ring core, wherein
each of the at least two non-identical substituents contain a group capable of binding to a
cell receptor.
2. (Original) The composition of claim 1 wherein at least one of the non-
identical substituents is covalently bound to a ring nitrogen.
3. (Currently Amended) The composition of claim 1 ~~or 2~~ wherein at least
one of the non-identical substituents is covalently bound to a ring carbon.
4. (Currently Amended) The composition of ~~any of~~ claims 1-3 wherein at
least one of the non-identical substituents are covalently bound to the ring via an alkyl
linking group, an alkyl carbonyl linking group, or an alkyl amide linking group.
5. (Currently Amended) The composition of ~~any of~~ claims 1-4 wherein the
tetraazacyclododecane macrocycle ring core is chelated to a metal ion.

6. (Original) The composition of claim 5 wherein the metal ion is selected from the group of metals consisting of: La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Y, and Sc.

7. (Original) A composition comprising a metal-chelating ligand including tetraazacyclododecane macrocycle having one or more alkyl carboxylic acids or salts thereof appended to the ring nitrogen(s), and

a $\alpha_v\beta_3$ receptor binding ligand covalently bonded to a ring nitrogen of the metal-chelating ligand via an alkyl linking group, an alkyl carbonyl linking group, or an alkyl amide linking group.

8. (Original) The composition of claim 7 tetraazacyclododecane macrocycle includes two alkyl carboxylic acids or salts thereof each attached to one ring nitrogen.

9. (Currently Amended) The composition of claim 7 ~~or 8~~ wherein the alkyl carboxylic acid is acetic acid.

10. (Currently Amended) The composition of ~~any of~~ claims 7-8 wherein the alkyl component of the alkyl carboxylic acid or salt thereof is a straight chain, a branched chain, cyclic or aromatic hydrocarbyl group having between 1-5 carbon atoms, and can be substituted with one or more of the following substituents, hydrogen, C1-C4 alkyl, C1-C4 branched alkyl or aromatic or heteroaromatic group or a combination of these groups.

11. (Currently Amended) The composition of ~~any of~~ claims 7 wherein the alkyl amide linking group is $-(CH_2)_nCO_2-$ wherein n is selected to be between 1 and 6.

12. (Original) The composition of claim 7 wherein the alkyl component of the alkyl linking group, the alkyl carbonyl linking group and the alkyl amide linking group is $-(CH_2)_nCO_2-$ wherein n is selected to be between 1 and 6.

13. (Original) The composition of claim 7 wherein the alkyl component of alkyl linking group, the alkyl carbonyl linking group and the alkyl amide linking group is a straight chain, a branched chain, cyclic or aromatic hydrocarbyl group having between 1-6 carbon atoms, and can be substituted with one or more of the following substituents, hydrogen, C1-C4 alkyl C1-C4 branched alkyl, aromatic, or heteroaromatic group.

14. (Currently Amended) The composition of ~~any of~~ claims 7-13 comprising a metal ion complexed to the tetraazacyclododecane macrocycle.

15. (Currently Amended) The composition of ~~any of~~ claims 7-14 wherein the metal ion is radioactive.

16. (Currently Amended) The composition of ~~any of~~ claims 1-15 wherein the metal ion is selected from the group consisting of: La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Y, and Sc.

17. (Original) A composition comprising:
a metal-chelating ligand including tetraazacyclododecane macrocycle having one or more alkyl carboxylic acids or salts thereof appended to the ring nitrogen(s), and
a guanidine substituent covalently bonded to a ring nitrogen of the metal-chelating ligand via an alkyl linking group, an alkyl carbonyl linking group, or an alkyl amide linking group.
18. (Original) The composition of claim 17 wherein the alkyl component of the alkyl linking group, an alkyl carbonyl linking group or an alkyl amide linking group is a straight chain, a branched chain, cyclic and/or aromatic group.
19. (Currently Amended) The composition of ~~any of~~ claims 17-18 comprising a metal ion complexed to the tetraazacyclododecane macrocycle.
20. (Currently Amended) The composition of ~~any of~~ claim 17-19 wherein the metal ion is radioactive.
21. (Currently Amended) The composition of ~~any of~~ claim 17-20 wherein the metal ion is selected from the group consisting of: La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Y, and Sc.

22. (Original) A method of inhibiting tumor cell growth, said method comprising:

administering to the tumor cells an effective amount of a composition including a compound having a metal-chelating ligand including tetraazacyclododecane macrocycle having one or more alkyl carboxylic acids or salts thereof appended to the ring nitrogen(s), and a $\alpha_v\beta_3$ receptor binding ligand covalently bonded to a ring nitrogen of the metal-chelating ligand via an alkyl group linking group, an alkyl carbonyl linking group, or an alkyl amide linking group.

23. (Original) The method of claim 22 wherein the composition comprises a radioactive metal ion chelated to the metal-chelating ligand.

24. (Currently Amended) The method of ~~any of~~ claims 22-23 wherein the tumor cell is selected from the group consisting of osteosarcomas, neuroblastomas, glioblastomas, melanomas, and carcinomas.

25 (Original) A method of inhibiting tumor cell growth, said method comprising administering to the cells a metal-chelating ligand including tetraazacyclododecane macrocycle having one or more alkyl carboxylic acids or salts thereof appended to the ring nitrogen(s), and
a guanidine substituent covalently bonded to a ring nitrogen of the metal-chelating ligand via an alkyl linking group, an alkyl carbonyl linking group, or an alkyl amide linking group.

26. (Original) The method of claim 25 wherein the composition comprises a radioactive metal ion chelated to the metal-chelating ligand.

27. (Currently Amended) The method of ~~any of~~ claims 25-26 wherein the tumor cell is selected from the group consisting of osteosarcomas, neuroblastomas, glioblastomas, melanomas, and carcinomas.